

中一數學科 – 數列 Sequences 練習

一 . 猜測下列各數列的未知數的值。 Guess the values of the unknowns in the following sequences.

(a) 1, 4, 7, 10, x , y , ...

(b) -2, -4, -6, -8, x , y , ...

(c) x , 2, 4, 8, 16, y , ...

(d) -6561, x , -729, -243, y , ...

(e) -1, 3, -9, 27, x , y , ...

(f) 25, 36, x , 64, 81, y , ...

(g) 1, 2, 4, 7, 11, 16, x , y , ...

摘星攻略：

通常可嘗試考慮相鄰項的差及商。

二 . 下列各題中， a_n 為一數列的通項，求該數列的第 12 項。 In each of the following, a_n is the general term of a sequence, find the 12th term of the sequence.

(a) $a_n = \frac{n(n+1)}{2}$

(b) $a_n = \frac{(n+3)(28-n)}{6}$

(c) $a_n = \frac{n^2(n+1)^2}{4}$

(d) $a_n = \frac{-n^3 + 3n^2 - 16}{16}$

掃描 QR Code
查閱教學影片及工作紙答案



三．完成下列各題。 Complete the following questions.

1. 已知 $\frac{5}{4}(7-3n)$ 為一數列的通項。 It is given that $\frac{5}{4}(7-3n)$ is the general term of a sequence.

(a) 求該數列的第 13 項。

Find the 13th term of the sequence.

(b) 20 是否該數列的其中一項？試解釋你的答案。

Is 20 a term of the sequence? Explain your answer.

2. 設 a_n 為一數列的通項。已知 $a_{n+2} = 2a_{n+1} - a_n$ 。 Let a_n be the general term of a sequence. It is given that $a_{n+2} = 2a_{n+1} - a_n$.

(a) 若 $a_1 = 3$ 及 $a_2 = 5$ ，求 a_9 。

If $a_1 = 3$ and $a_2 = 5$, find a_9 .

(b) 若 $a_9 = 31$ 及 $a_{10} = 36$ ，求 a_1 。

If $a_9 = 31$ and $a_{10} = 36$, find a_1 .

